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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/849,793	05/04/2001	Shyh-Mei F. Ho	SVL920010041US1	1989

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EXAMINER

PRICE, NATHAN E

ART UNIT	PAPER NUMBER
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2194

DATE MAILED: 04/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	09/849,793		HO ET AL.	
	Examiner		Art Unit	
	Nathan Price		2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 26 January 2006 has been entered.

2. Claims 1 – 2 and 4 – 12 are pending. Claim 3 has been canceled.

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 401, 403, 405, 407 and 409 (see page 24, lines 22 – 28, of the specification). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If

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the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Claims 1, 2 and 4 are objected to because of the following informalities: independent claim 1, in step e), states that there is at least one connector between the end user application and the application server. This limitation is inherent as a result of the added limitation in step b) (the web server comprises a connector), so it is not clear if step e) refers to at least one additional connector or if this limitation will be satisfied if step b) is satisfied. Further, it is not clear if steps (i) and (ii) are performed by the at least one connector. Appropriate correction is required.

5. Claims 8 – 10 are objected to because of the following informalities: there is a lack of antecedent basis for “the client” in line 3 of claim 8. Also, it is not clear if the connector is supposed to receive the application request from the server (see claim 8, part C line 1) or if Applicant intended for the connector to receive a response from the server. Claims 9 and 10 inherit these deficiencies. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 8 – 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 8 states “an application request” in both lines 4 and 6. It is not clear which request is referred to by “the application request” throughout the claim. Claims 9 and 10 inherit this deficiency.

Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claims 11 and 12 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The language of claim 11 raises questions as to whether computer hardware is required to implement the claimed invention. Claim 11 specifies that the program product comprises a storage medium. Paper on which computer instructions can be printed is a storage medium and is not statutory because it is considered to be descriptive matter. Therefore, “storage medium,” as opposed to “computer readable storage medium,” is non-statutory.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1 – 2 and 4 – 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ben-Shachar (US 5,761,656) in view of Flanagan et al. (US 6,243,737 B1).

12. As to claim 1, Ben-Shachar substantially discloses a method of processing an application request on an end user application and an application server (abstract) comprising the steps of:

- a) initiating the application request on the end user application in a first language with a first application program (col. 5 lines 6 – 10);
- b) transmitting the application request to the server and converting the application request from the first language of the first end user application to a form for the language running on the application server (col. 5 lines 3 – 12), wherein the end user application is connected to the application server through a web server, and the web server comprises a connector (col. 6 lines 18 – 32);
- c) processing said application request on the application server (col. 5 lines 6 – 15);
- d) transmitting a response to the application request from the application server to the end user application, and converting the response to the application

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request from the language running on the application server to the first language of the first end user application (col. 5 lines 12 – 17); and

e) wherein the end user application and the application server have at least one connector therebetween (col. 5 lines 6 – 15), and the steps of (i) converting the application request from the first language of the first end user application as a source language to the language running on the application server as a target language (col. 5 lines 6 – 12), and (ii) converting a response to the application request from the language running on the application server as a source language to the first language of the first end user application as a target language (col. 5 lines 13 – 16), each comprise the steps of:

1) invoking connector metamodels of respective source language and target language ("mapping file" col. 5 lines 6 – 15);

2) populating the connector metamodels with metamodel data of each of the respective source language and target language, the metamodel data of the target language including a map, a mapset, and a mapfield (Figure 3; col. 5 lines 29 – 48; col. 9 lines 10 – 22); and

3) converting the source language to the target language (col. 9 lines 10 – 22).

13. Ben-Shachar fails to specifically disclose a mapping support language.

However, Flanagan et al. substantially disclose a mapping support language (col. 10 lines 1 – 16). It would have been obvious to one of ordinary skill in the art at the time of

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Applicant's invention to combine these references because both references focus on providing server processing to clients.

14. As to claim 2, the method of claim 1 is rejected for the reasons above. Ben-Shachar substantially discloses that the end user application is a web browser (col. 5 lines 29 – 33).

15. As to claim 4, the method of claim 1 is rejected for the reasons above. Ben-Shachar also substantially discloses that the metamodel comprises invocation metamodel data, application domain interface metamodel data, transaction message metamodel data, and type descriptor metamodel data (col. 4 lines 30 – 36; col. 5 lines 39 – 50).

16. Claims 5 and 7 are system claims corresponding to the method of claim 1. Therefore, claims 5 and 7 are rejected for the same reasons as claim 1.

17. The limitation added by claim 6 is equivalent in scope to the limitation added by claim 2 and is therefore rejected for the same reason.

18. Claims 8 and 10 are system claims corresponding to the method of claim 1. Therefore, claims 8 and 10 are rejected for the same reasons as claim 1.

19. The limitation added by claim 9 is equivalent in scope to the limitation added by claim 2 and is therefore rejected for the same reason.

20. As to claim 11, Ben-Shachar substantially discloses a program product comprising a storage medium (inherent) having invocation metamodel data, application domain interface metamodel data, language metamodel data, and mapping metamodel data (col. 4 lines 30 – 36; col. 5 lines 39 – 50), said mapping metamodel data including a map, a mapset, and a mapfield (Figure 3; col. 5 lines 29 – 48; col. 9 lines 10 – 22); and computer instructions for building a metamodel data repository of source and target language metamodel data (col. 2 lines 32 – 43).

21. Ben-Shachar fails to specifically disclose a mapping support language. However, Flanagan et al. substantially disclose a mapping support language (col. 10 lines 1 – 16). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to combine these references because both references focus on providing server processing to clients.

22. As to claim 12, the program product of claim 11 is rejected for the reasons above. Ben-Shachar, as modified above to include mapping support languages, substantially discloses that the metamodel data in the repository comprises invocation metamodel data, application domain interface metamodel data, mapping support

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language metamodel data, and type descriptor metamodel data (col. 4 lines 30 – 36; col. 5 lines 39 – 50).

Inventorship

23. Examiner notes that Stephen Andrew Brodsky is listed as an inventor in provisional application 60/223671 to which this application claims a priority benefit. Also, Andrzej McColl Krasun and Benjamin Johnson Sheats are listed as inventors on the current application, but not the provisional application to which this application claims a priority benefit. Shyh-Mei F. Ho is listed as an inventor in both applications. Examiner assumes that the list of inventors in the current application is correct.

Response to Arguments

24. Applicant's arguments with respect to claims 1, 2 and 4 – 12 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

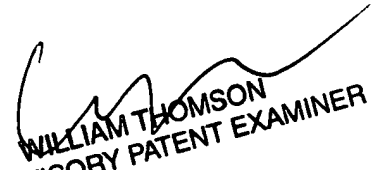
25. The prior art made of record on the P.T.O. 892 that has not been relied upon is considered pertinent to applicant's disclosure. Careful consideration of the cited art is required prior to responding to this Office Action, see 37 C.F.R. 1.111(c).

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Price whose telephone number is (571) 272-4196. The examiner can normally be reached on 7:30am - 4:00pm, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571) 272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NP


WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER